

ABSTRACT OF THE DISCLOSURE

This invention is directed to methods and reagents useful for sequencing nucleic acid targets utilizing sequencing by hybridization technology comprising probes, arrays of probes and methods whereby sequence information is obtained rapidly and efficiently in discrete packages. That information can be used for the detection, identification, purification and complete or partial sequencing of a particular target nucleic acid. When coupled with a ligation step, these methods can be performed under a single set of hybridization conditions. The invention also relates to the replication of probe arrays and methods for making and replicating arrays of probes which are useful for the large scale manufacture of diagnostic aids used to screen biological samples for specific target sequences. Arrays created using PCR technology may comprise probes with 5'- and/or 3'-overhangs.

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